## ISSUE SLIP STAPLE AREA (for additional cross references)

| POSITION                  | INITIALS | ID NO. | DATE    |  |  |
|---------------------------|----------|--------|---------|--|--|
| FEE DETERMINATION         | Canan    |        |         |  |  |
| O.I.P.E. CLASSIFIER       |          | J.F    | 1/1/01  |  |  |
| FORMALITY REVIEW          | CA       | TI     | 7/13/21 |  |  |
| RESPONSE FORMALITY REVIEW | rel      | in30   | 10-00   |  |  |
|                           | 100      |        | 17 1-01 |  |  |

## **INDEX OF CLAIMS**

| ✓ Rejected                                     | N Non-elected  |
|--|----------------|
| = Allowed                                      | I Interference |
| <ul> <li>(Through numeral) Canceled</li> </ul> | A Appeal       |
| ÷ Restricted                                   | O Objected     |

|                                       | ٠.       |                |     |       |   |          |   |    |   |    |   | +        | -            | •• | ••• | •••• | •••      | •••• |          |   |
|---------------------------------------|----------|----------------|-----|-------|---|----------|---|----|---|----|---|----------|--------------|----|-----|------|----------|------|----------|---|
|                                       | <u></u>  | lain           | . 1 |       |   | -        |   | -  |   | -  | _ | n,       |              | _  | _   | _    | _        | _    |          | _ |
| •                                     | ۲        | Т              |     | ٦     | Z | F        |   | Т  | 1 | _  | 7 | <u> </u> | ate          | _  | Г   |      | _        | Т    | 1        |   |
|                                       | ۱ ـ      | Prioring       |     | 10.01 | 0 |          |   |    |   |    | İ |          | l            |    |     |      |          |      |          |   |
| •                                     | Final    | ١٤             | ,   | '     | • |          |   |    | i |    | ١ |          | ı            |    |     | ı    |          |      |          |   |
| •                                     | ٦        | T              |     | 7     | Ħ | _        |   | _  | 1 |    | t |          | t            | -  | ┢   | +    |          | t    | ╁        |   |
|                                       | Т        |                | 2   | 1     | 7 | Г        | - | Г  | 1 | -  | † |          | †            |    | ┢   | †    | -        | t    | t        | _ |
| ,                                     |          |                | 3   | 1     | 1 | Н        |   | ┢  | 1 |    | † |          | T            |    | 1   | †    |          | T    | †        | 7 |
| •                                     |          | 1              | \$  | t     | 7 | _        | _ | Н  | t |    | † |          | $^{\dagger}$ | -  | -   | †    |          | t    | 十        | - |
|                                       |          | 1              | 5   | 1     | 1 | Г        |   | ۲  | 1 |    | 1 |          | T            |    |     | Ť    |          |      | T        |   |
| 1                                     |          | 1              |     | 1     | 1 |          |   | ţ  | 1 |    | 1 |          | T            |    | Г   | T    | _        | 1    | T        |   |
| j                                     |          | 7              | _1  | I     | 1 |          |   | 1  | Ī |    | T |          | Τ            |    |     | T    |          | Τ    | ١.       |   |
|                                       |          | [ 8            | Ī   | I     |   |          |   | 4, | J |    | I |          |              |    |     | Ι    |          |      | Ι        |   |
|                                       |          | ٤              |     | L     | _ |          |   |    | İ |    | I |          |              |    |     | Ţ    |          |      | Γ        |   |
|                                       |          | 10             | 2   | L     |   |          |   |    | I |    | I |          |              |    |     | Ι    |          |      |          |   |
| r.                                    | j.       | 1              |     | L     |   | _        |   |    | 1 |    | I |          |              |    |     | Ι    |          |      | Ι        | ] |
|                                       | Ţ        | 12             |     | L     | 1 | _        |   |    | 1 |    | L |          | L            |    |     | l    |          |      | Γ        |   |
|                                       | 19       | 13             |     | Ŀ     | 1 | _        | ╛ | _  | 1 |    | L |          |              |    |     | I    |          | L    |          |   |
| 1                                     |          | 14             | 4   | L     | 1 |          | 1 |    | 1 |    | l |          | L            |    |     | Ţ    |          |      | L        |   |
| 1                                     |          |                | 4   | L     | 1 |          | 1 |    | 1 | _  | L |          | L            | _  |     | 1    | _        | L    | L        | ╛ |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | <u>:</u> | 16             | 1   | L     | 1 |          | 1 |    | 1 |    | L | _        | L            | _  |     | 1    |          | L    | L        | ╛ |
| Í.                                    | 自身       | 17             | Ш   | Ĺ     | ļ | <u>`</u> | 1 | :  | 1 | _  | L |          | L            | 1  | _   | ╀    | _        | L    | L        | ┙ |
| 1                                     | 4        | 18             | Щ   | L     | 1 | -        | 4 | _  | 1 |    | L |          | L            | 4  |     | Ļ    |          |      | L        | 4 |
| /                                     | 3,       | 19             |     | L     | 1 |          | ļ | _  | ļ | _  | L | _        | L            | 1  |     | L    |          | L    | L        | J |
|                                       | i,       | 20             | 1   | L     | 1 |          | 1 |    | L |    | L |          | L            | 1  |     | L    |          |      | L        | j |
| ١                                     | _,       | 21             | 1   | L     | 1 | _        | 1 |    | L |    | L | _        | L            | 1  |     | L    |          |      | L        |   |
| ı                                     | <u>.</u> | 22             | 1   | L     | ļ |          | 1 | •• | ļ |    | L | _        | L            | 1  |     | L    |          |      | L        | 1 |
| įĮ                                    | 人はがでで    | 22<br>23<br>24 | 1   | L     | ļ |          | ļ | _  | L |    | L | _        | L            | 1  |     | L    |          |      | L        | ╛ |
|                                       | SV.      | 24             | L   | Ŀ     | ļ | • •      | 1 | Ŧ  | L | ٠. | L |          | L            | 1  | _   | L    |          |      | L        | 1 |
| ŀ                                     | <u>\</u> | 25<br>26       | ļ   | L     | ļ | _        | ļ |    | L | _  | L | _        |              | 1  |     | L    |          |      | L        | 1 |
| ŀ                                     | <u>«</u> | 25             | ľ   | L     | ╀ | _        | ļ |    | Ļ | _  | L | _        | _            | 1  | _   | L    | 4        |      | L        | 1 |
| H                                     |          | 1              | H   | L     | ł |          | ļ |    | L | _  | L | _        | L            | 4  | _   | L    |          | _    | L        | 4 |
| ŀ                                     |          | 20             | H   | Ļ     | ╀ | _        | ł |    | ╀ | _  | L | _        | <u> </u>     | 4  |     | Ł    | -        |      | L        | 4 |
| ŀ                                     | 7        | 27.88 27.89    | H   | ┝     | ł | _        | ł |    | ┞ | -  | L | _        |              | +  |     | ┝    | 4        |      | ⊢        | 4 |
| ŀ                                     | ۷,       | 31             | Ľ   | _     | ╀ | _        | ╀ | _  | H | _  | H | -        |              | ╀  | _   | ┞    | $\dashv$ | _    | -        | - |
| ŀ                                     | -        | 32             | ┞   | _     | ł |          | ł |    | H | _  | _ | -        |              | ╀  |     | ┞    | 4        |      | -        | 1 |
| ŀ                                     | _        | 33             | H   |       | ۱ | -        | ł | _  | ┝ | -  | _ | $\dashv$ |              | ł  |     | ┞    | 4        | _    | H        | + |
| ŀ                                     | _        | 34             | ╁   |       | H | -        | ł |    | ┝ | -  | _ | -        |              | ł  |     | H    | ┥        |      | $\vdash$ | ┨ |
| t                                     | ┪        | 35             | H   | -     | ۲ | -        | ŀ | _  | H | ٦  | - | +        |              | t  |     | H    | ┪        |      | ⊢        | ┨ |
| r                                     |          | 36             | t   |       | t | -        | t | _  | H | ┪  | - | ┪        |              | t  | _   | H    | ┪        |      | $\vdash$ | 1 |
| r                                     |          | 37             | r   | _     | t | _        | t |    | Ì |    | - | 7        |              | t  | _   | H    | 7        |      | $\vdash$ | 1 |
| r                                     |          | 38             | r   | _     | T |          | t |    | 7 | ч  | _ | 7        |              | t  |     | H    | 1        |      |          | 1 |
| r                                     | ╗        | 39             |     |       | T |          | t |    | Г | ţ  | _ | 7        |              | t  | _   | H    | 1        |      |          | 1 |
| r                                     |          | 40             | Г   |       | T |          | r |    | r | 7  |   | 7        | -            | t  |     | r    | 1        |      | _        | 1 |
| ۲                                     | Ę        | 41             | r   |       | Γ | _        | r |    | H | 7  | _ | 1        |              | t  |     | H    | †        |      | -        | 1 |
| r                                     | Ì        | 42             | r   |       | H | _        | H | _  | - | 7  | - | 7        |              | t  |     | H    | +        | _    |          | 1 |
| r                                     | ┪        | 43             | r   | ٦     | r |          | r | ┪  | _ | 1  |   | +        |              | t  | -   | H    | +        | -    | -        | 1 |
| r                                     |          | 44             | r   |       | r |          | r | _  |   | 1  | _ | 1        |              | t  | _   | Н    | 1        | -    |          | ł |
| r                                     | Ì        | 45             | Г   | ┪     | T |          | r | ٦  | - | 1  |   | 1        |              | t  |     | H    | +        | _    | _        | 1 |
| Γ                                     |          | 46             |     | ٦     | Γ |          | Ī | T  | _ | 1  | - | 1        | _            | 1  | _   | Т    | †        | ᅦ    |          | 1 |
| Г                                     | 7        | 47             | Г   |       | Γ |          | Γ |    | _ | ┪  | _ | 1        |              | T  |     |      | 1        | T    |          | ١ |
| Γ                                     |          | 48             |     |       | Γ |          | Γ | ٦  | _ | 7  |   | 7        |              | t  | T   | H    | †        |      | _        | 1 |
| Ĺ                                     |          | 49             |     | _     | Γ |          | Γ |    | _ | 1  | _ | 7        |              | T  | ٦   |      | †        |      | _        | 1 |
| Ĺ                                     |          | <u>5</u> 0     |     |       |   |          |   |    | _ |    |   | 7        |              | ٢  |     | _    | 1        |      | _        | 1 |

| C         | laim     | T           |          |  | _          | D             | ate      |                |          |          |                   |
|-----------|----------|-------------|----------|--|------------|---------------|----------|----------------|----------|----------|-------------------|
| Linns     | -        |             |          |  |            |               |          |                |          |          |                   |
| +         | 51       | +           | ╁        | +-   | +-         | +             | +        | +              | +        | +        | ╅╴                |
| <u> </u>  | 52       | _           | ╁        | +  | +          | +             | +        | +              | +        | +        |                   |
| +         | 53       | _           | +        | +  | +          | ╁             | +        | +              | ╁        | +        | ╁                 |
| $\vdash$  | 54       |             | +        | +  | +-         | +             | ┿        | +-             | +        | +-       |                   |
| $\vdash$  | 55       |             | ╁╌       | ╁  | +          | ┿             | ┰        | ╁              | ┿        | ┰        | +-                |
| $\vdash$  | 56       | -           | +        | ╁  | ╫          | +             | +        | ╁              | +-       | ╁        | +                 |
| $\vdash$  | 57       | _           | +        | ╁  | ┿          | +             | ╁        | +              | ╁        | ╁        | ╁                 |
| $\vdash$  | 58       |             | +        | ╁  | +-         | +             | ╁        | ╅╴             | ╁        | ┿        | +                 |
| $\vdash$  | 59       | <del></del> | ╁╴       | ╁  | +          | +             | ╈        | ╁╌             | +        | ╁╌       | +                 |
| <b> </b>  | 60       | -           | ╁╴       | +  | 1          | +-            | +        | +              |          | +        | ╁╌                |
| -         | 61       |             | ╁        | +  | +-         | +             | ╁        | ┿              | +        | ╁        | ╁                 |
| $\vdash$  | 62       | t           | T        | +  | +          | +-            | +        | +              | ╁        | ✝        | ╁╌                |
| $\vdash$  | 63       |             | T        | 1-   | +          | †-            | +        | ╅              | †        | +        | -                 |
| $\vdash$  | 64       | -           | 1        | ╈  | $\dagger$  | +-            | +        | +              | +-       | t        | +-                |
| $\vdash$  | 65       | -           | 1-       | +  | +          | +-            | +        | +              | ╁        | t        | <del> </del>      |
| $\vdash$  | 66       | -           | 1        | ✝  | T          | †-            | +        | t              | †        | +        | 1-                |
| $\vdash$  | 67       | -           |          | 1  | $\top$     | +             | ╁╌       | +              | †-       | †        |                   |
|           | 68       | 1           |          | 1  | T          | T             | †        | †              | 1        | T        | ١.                |
| Г         | 69       | T           |          | <u>                                     </u> | 1          | $\top$        | 1        | 1              | 1        | $\vdash$ | H                 |
|           | 70       |             | 1        | T  | T          | T             | t        | 1              | T        | ✝        | Н                 |
| $\vdash$  | 71       | t           | H        | ╁  | 1          | ╁┈            | ╁        | $\vdash$       | 1        | $\vdash$ | $\vdash$          |
| -         | 72       | 13          | 1-       | t  | t          | t             | $\vdash$ | ╁╌             | t        | ✝        | $\dagger \exists$ |
| $\vdash$  | 73       |             |          | Г  | Т          | 1             | T        | 1              | T        | H        | $\vdash$          |
|           | 74       |             |          | ٦.   | 1          | T             | T        | t              | T        | T        | П                 |
|           | 75       | Г           | ·        | Γ  | Т          | T             |          | 1              | T-       |          | П                 |
| $\square$ | 76       |             |          |  |            | Г             | Т        |                |          |          | П                 |
|           | 77       |             |          |  |            |               |          |                |          | Г        | П                 |
|           | 78       |             |          |  |            |               |          |                |          | Γ        | П                 |
| ╙         | 79       |             |          | L  |            |               |          |                |          |          |                   |
| _         | 80       | L_          | _        | L  | <u> </u>   | L             | _        |                | L        |          |                   |
|           | 81       | L.,         | <u> </u> | L  | <u> </u>   |               | <u> </u> | <u>_</u>       | Ц.       | L        | Ш                 |
| <u> </u>  | 82       | Щ           | ļ        | _  | <u>L</u> . | _             |          | _              | <u> </u> | Ļ_       | Ш                 |
| <u> </u>  | 83       |             | <u> </u> | <u> </u>                                     | L          | 1             | ├_       | <del> </del> _ | L        | L        | Ц                 |
| -         | 84<br>85 | -           |          | <u> </u>                                     | <u> </u>   | ⊢             | ┞        | <del> </del> _ | _        | <u> </u> | Ш                 |
| ⊢         | 86       | _           | H        | -  | _          | ┡             | ⊨        | ⊢              | <u> </u> | -        |                   |
| ⊢         | 87       | _           | -        | _  |            | -             | -        | -              | ⊢        | H        | $\vdash$          |
| ┝         | 88       |             | -        | -  | -          | ├             | ┢        | -              |          | -        | $\vdash$          |
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| Н         | 90       | -           |          | -  | ├─         | ⊢             | ├        | $\vdash$       | -        | -        | Н                 |
|           | 91       | -           |          | _  | ┝          | <del> </del>  | -        | ┢              | ┝        | $\vdash$ | Н                 |
| ├─        | 92       | $\dashv$    | -        |  | ⊢          | $\vdash$      | ⊢        | <del> </del>   | _        | ├        | Н                 |
| H         | 93       | -           |          | _  | H          | -             | $\vdash$ | $\vdash$       | -        | $\vdash$ | H                 |
| Н         | 94       | -           | $\vdash$ |  | $\vdash$   | -             |          | $\vdash$       | Н        | Н        | H                 |
| $\vdash$  | 95       | -           |          | -  | -          | $\vdash$      | <u> </u> |                |          | $\vdash$ | Н                 |
|           | 96       | $\dashv$    | -        |  |            | -             | $\vdash$ | $\vdash$       | Н        | Н        | $\vdash$          |
| П         | 97       | $\neg$      | П        |  |            | ┢             | Н        | Г              | Н        | Н        | $\vdash$          |
|           | 98       | $\dashv$    | $\dashv$ | _  | _          | Н             | $\vdash$ |                | -        | ┝        | Н                 |
|           | 99       |             | П        |  |            | $\overline{}$ | Г        |                |          | П        | Н                 |
|           | 100      |             |          |  |            | П             |          | <u> </u>       |          | _        | П                 |

|          | aim      | ı –      |          |          | _        | _        |              | •        |              | _        | ,-  |
|----------|----------|----------|----------|----------|----------|----------|--------------|----------|--------------|----------|-----|
| 100      |          | -        | -        | _        | т-       | Da       | te           | _        | _            |          | γ   |
| Final    | Original |          |          |          |          |          |              |          |              |          |     |
| Ë        | 101      | r        | ╁        | +        | ╁╴       | +-       | ╁╌           | ╁        | ┝            | -        | ⊢   |
| Ι-       | 102      | -        | ✝        | ╁        | ╁        | +        | ╁╌           | ╁        | ├            | -        | ⊢   |
|          | 103      | -        | +        | ╁        | ┿        | ╁        | ┼-           | ╁        | -            | -        | -   |
| Н        | 104      | _        | ╁        | +-       | ╁        | ╁        | ┼            | ├-       | ├            | -        | Ь.  |
| $\vdash$ | 105      |          | H        | +        | ╁        | ╁        | ╁            | ├        | -            | -        | ├-  |
|          | 106      | -        | H        | †-       | ╁        | ╁        | $\vdash$     | -        | ┢            | -        | -   |
|          | 107      | _        | ✝        | †~       | +        | 1        | <del> </del> | -        | <del> </del> | ┝        | -   |
| П        | 108      |          |          | ✝        | 1        | 1        | ┢            | 1        | -            | -        | Ι÷  |
|          | 109      |          |          | $\vdash$ | 1        | _        | 1            | ┢        | <del> </del> | ┢        | ┢   |
|          | 110      |          |          | T        | +-       | Г        | 1            | ┪        | ┢            | -        | ┝┈  |
|          | 111      |          |          | 1        | 1        | T        |              |          | -            | _        | H   |
|          | 112      |          |          | Г        |          |          |              | <u> </u> | Т            | -        | ┢   |
|          | 113      | _        |          |          |          | Г        | Γ            | Г        | ·            | Г        | 7   |
|          | 114      |          |          |          |          | Γ        |              |          |              |          |     |
|          | 115      |          |          |          |          |          |              |          |              |          |     |
|          | 116      |          |          |          | Г        |          | •            | -6       | خ            |          |     |
|          | 117      |          |          | ÷-       |          |          | 25.          | * 1      | χŝ,          | X,       | 4,0 |
|          | 118      |          | Ŀ        | Ŀ        |          | 1        | 1,00         |          | 34           | *        |     |
|          | 119      |          | L        | į,       |          | ε.       | ζ,           | 7        | 1            |          | 3   |
| þ        | 120      |          |          |          |          | 1        | 8°,          | 1        |              | 2.5      |     |
|          | 121      |          | _        |          | Γ        |          |              |          |              | _        |     |
|          | 122      |          |          |          | Г        |          |              |          | 1            | ٠,       |     |
|          | 123      |          |          |          |          |          |              |          |              |          |     |
|          | 124      |          |          |          |          |          |              | ·        | ÷.           |          | ¥.  |
|          | 125      |          |          |          |          |          |              |          |              |          |     |
|          | 26       | _        |          | L        |          | _        |              |          |              |          |     |
|          | 27       |          |          |          |          |          |              |          |              |          |     |
|          | 28       | _        |          | L        |          |          | Щ            |          |              |          |     |
|          | 29       | 4        |          |          |          |          |              |          |              |          | _   |
| _        | 30       | 4        |          |          |          |          |              |          |              |          |     |
|          | 31       | 4        |          |          | Ш        |          |              | $\Box$   |              | _        |     |
|          | 32       | -        |          | _        |          | Ш        |              |          |              | _        | _   |
| -[       | 33<br>34 | 4        |          | _        | -        | -        | $\dashv$     | _        |              | _        |     |
|          | 35       | 4        | _        |          | -        |          | _            | _        | -            | _        | _   |
|          | 35<br>36 | -        | -        | 4        | $\vdash$ | -        | -            | _        | -            |          |     |
|          | 30<br>37 | +        |          | -        | $\vdash$ | -        | -            | $\dashv$ | $\dashv$     | $\dashv$ |     |
|          | 38       | $\dashv$ | $\dashv$ | 4        | -        | $\dashv$ | -            | ᅱ        | $\dashv$     | $\dashv$ |     |
|          | 39       | $\dashv$ | -        | $\dashv$ | $\dashv$ | -        | $\dashv$     | $\dashv$ | -            |          | _   |
|          | 40       | +        | -        | $\dashv$ |          | $\dashv$ | -            | -        | -            | $\dashv$ |     |
|          | 41       | $\dashv$ | -        | -        | $\dashv$ | $\dashv$ |              |          | $\dashv$     | ┥        |     |
| I        | 42       | +        |          | $\dashv$ |          | -        |              |          | -            | $\dashv$ |     |
|          | 43       | $\dashv$ | $\dashv$ | _        | $\dashv$ | $\dashv$ | $\dashv$     | $\dashv$ | -            | -        |     |
|          | 44       | +        | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$     | $\dashv$ | $\dashv$     | -        | _   |
| <u> </u> | 45       | +        | -        | -        |          | +        | -            | -        | -            | 닉        |     |
|          | 46       | $\dashv$ | $\dashv$ | -        |          | $\dashv$ | $\dashv$     | $\dashv$ | -            | -        | _   |
|          | 47       | +        | $\dashv$ | -        |          | +        | $\dashv$     | $\dashv$ | -            | $\dashv$ | -   |
|          | 48       | $\dashv$ | -        | -        | +        |          | -            | $\dashv$ | -            | $\dashv$ | -   |
|          | 49       | $\dashv$ | $\dashv$ |          | -        | $\dashv$ | +            |          | -            |          | _   |
|          | 50       | +        | ┪        | -        | -        | ┪        | +            |          | $\dashv$     | $\dashv$ |     |
|          |          |          |          | _        |          |          |              |          |              |          | _   |

If more than 150 claims or 10 actions staple additional sheet here

(LEFT INSIDE)

BEST AVAILABLE COPY

13/01